MEETING NOTICE
AND AGENDA

CITIES/COUNTY TRANSPORTATION ADVISORY COMMITTEE (CTAC)
The CTAC may take action on any item appearing on this agenda.

Thursday, January 5, 2012
9 to 11 a.m.

SANDAG, 7th Floor Conference Room
401 B Street, Suite 800
San Diego, CA 92101-4231

Chair: Zoubir Ouadah, City of Poway
Vice Chair: Mario Sanchez, City of El Cajon

Staff Contact: Alex Estrella
(619) 699-1928
aes@sandag.org

AGENDA HIGHLIGHTS

• SANDAG FEDERAL CONGESTION MANAGEMENT PROCESS
• REGIONAL ARTERIAL MANAGEMENT SYSTEM UPDATE
• WALKSANDIEGO "SAFE FOR ALL" COMPLETE STREETS REPORT

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To request this document or related reports in an alternative format, please call (619) 699-1900, (619) 699-1904 (TTY), or fax (619) 699-1905.
ITEM # | RECOMMENDATION
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1. | WELCOME AND INTRODUCTIONS
2. | PUBLIC COMMENTS

Members of the public shall have the opportunity to address the Cities/County Transportation Advisory Committee (CTAC) on any issue within the jurisdiction of the San Diego Association of Governments (SANDAG) that is not on this agenda. Anyone desiring to speak shall reserve time by completing a “Request to Speak” form and giving it to the CTAC coordinator prior to speaking. Public speakers should notify the CTAC coordinator if they have a handout for distribution to working group members. Public speakers are limited to three minutes or less per person. CTAC members also may provide information and announcements under this agenda item.

+3. | MEETING SUMMARY OF THE DECEMBER 1, 2011, JOINT REGIONAL PLANNING TECHNICAL WORKING GROUP AND THE CITIES/COUNTY TRANSPORTATION ADVISORY COMMITTEE WORKSHOP

Review and approve the December 1, 2011, meeting summary.

REPORTS (4 through 9)

+4. | CITIES/COUNTY TRANSPORTATION ADVISORY COMMITTEE 2012 MEETING SCHEDULE AND MEMBERSHIP ROSTER (Alex Estrella)

As we begin the year 2012, attached for your reference is the CTAC meeting schedule. Also attached is the current CTAC membership and alternate roster. Please review and revise the roster as appropriate and be prepared to submit your changes, in writing, during the CTAC meeting. Please note that this information is required as all CTAC members and alternates will be required to submit a new Form 700 for 2011. Information on the Form 700 will be provided in February or March.

+5. | SAN DIEGO ASSOCIATION OF GOVERNMENTS FEDERAL CONGESTION MANAGEMENT PROCESS (Heather Adamson)

Staff will provide an overview of the Federal Congestion Management Process and its incorporation within the 2050 Regional Transportation Plan (RTP) and the upcoming 2012 Regional Transportation Improvement Program. The Federal Congestion Management Process (Technical Appendix 20) from the 2050 RTP is attached.
6. REGIONAL ARTERIAL MANAGEMENT SYSTEM UPDATE (Mario Sanchez
2011 San Diego Regional Traffic Engineers Council Chair and
Ellison Alegre)

Over the last few months, SANDAG staff has developed a path toward a regional
maintenance and support model for the Regional Arterial Management System.
The support model was developed in coordination with input from the San Diego
Regional Traffic Engineers Council (SANTEC). Staff will provide an overview of the
recommended and approved SANTEC support model and will request that CTAC
accept the recommendation.

7. ARTERIAL DETECTION SYSTEM DEVELOPMENT PLAN (Alex Estrella)

Over the next few months, SANDAG will complete an Arterial Detection System
Development Plan. This Plan will serve as the foundation for setting a strategic
vision for regional arterial detection needs. The Plan is considered the first phase
that will provide a number of foundational documents for future design and
construction of arterial detection subject to future funding.

8. WALKSANDIEGO "SAFE FOR ALL" COMPLETE STREETS REPORT
(Kathleen Ferrier, WalkSanDiego)

WalkSanDiego has undertaken a survey of complete streets policies and
implementation procedures for each of the local jurisdictions in the region. The
results of that survey are published in the report Safe for All. WalkSanDiego Policy
Director Kathleen Ferrier will present a summary of the report. Copies are
available at www.walksandiego.org/resources/publications/.

9. CALIFORNIA DEPARTMENT OF TRANSPORTATION UPDATES

California Department of Transportation will provide an update on various local
programs, funding program deadlines, and announcements regarding upcoming
conferences.

10. ADJOURNMENT AND NEXT MEETING

The next CTAC meeting is planned for Thursday, February 2, 2012.

+ next to an agenda item indicates an attachment
MEETING SUMMARY OF THE DECEMBER 1, 2011, JOINT REGIONAL PLANNING TECHNICAL WORKING GROUP AND THE CITIES/COUNTY TRANSPORTATION ADVISORY COMMITTEE WORKSHOP

Please note: Audio file of the meeting is available on the San Diego Association of Governments (SANDAG) Web site (www.sandag.org) on the Regional Planning Technical Working Group and the Cities/County Transportation Advisory Committee pages.

Agenda Item 1: Welcome and Introductions

The meeting was called to order by Bill Chopyk (City of La Mesa), Chair of the Regional Planning Technical Working Group (TWG), and Zoubir Ouadah (City of Poway), Vice Chair of the Cities/County Transportation Advisory Committee (CTAC).

Agenda Item 2: Public Comments and Communications

Members of the public had the opportunity to address the TWG and CTAC on any issue within the jurisdiction of the respective group that was not on the agenda.

Charles “Muggs” Stoll (SANDAG) distributed a letter from the consultants from the San Diego Foundation’s “Our Greater San Diego Vision” project. Mr. Stoll expressed his concern that the Foundation’s characterization of the current regional growth forecast in its public outreach efforts as predominantly high-rise infill development was misleading to the San Diego community. As such, Mr. Stoll asked TWG members if they would like to meet with the San Diego Foundation for further discussion of its visioning project. A majority of TWG members agreed to meet with the Foundation and its consultants.

Mike Bullock (Transportation Chair, San Diego Chapter of the Sierra Club) requested that SANDAG adopt policies to reduce greenhouse gas (GHG) emissions in lieu of highway expansions, and measure the effectiveness of programs based upon the reduction of vehicle miles traveled (VMT) per dollar spent.

Doris Payne Camp (San Diego Housing Federation) informed committee members that the San Diego Housing Federation had completed its affordable housing inventory. Ms. Payne Camp thanked the local jurisdictions for participating in the inventory compilation process and announced that data for all jurisdictions will be released in mid-January.
Agenda Item 3: Meeting Summary (Approve)

The CTAC members were asked to review and approve the CTAC November 3, 2011, meeting summary.

Action: Upon a motion by Mario Sanchez (El Cajon) and a second by a fellow CTAC member, the CTAC meeting summary was approved unanimously.

The TWG members were asked to review and approve the TWG November 10, 2011, meeting summary.

Action: Upon a motion by Kathy Garcia (Del Mar) and a second by Nancy Bragado (City of San Diego), the TWG meeting summary was approved unanimously.

CONSENT

Agenda Item 4: TransNet Smart Growth Incentive Program and Transportation Development Act/TransNet Active Transportation Grants Status Update (Information)

SANDAG approved the first round of smart growth incentive program projects under TransNet in May 2009, and the first round of Active Transportation Program grants in June 2009. The agenda report provided an overview of the progress made, to date, by the grant recipients.

Mr. Bullock expressed concern regarding the impacts of free car parking. Mr. Bullock stated that the costs of free parking are passed on in rent and the cost of goods and act to reduce wages. Mr. Bullock proposed unbundling the costs of car parking as a tool for reducing GHG emissions.

REPORTS (5 through 11)

Agenda Item 5: Update Status of Board Policy No. 033 (Information)

Susan Baldwin (SANDAG) provided an update on the status of potential amendments to Board Policy No. 033 being considered by the Board Ad Hoc Subcommittee on Board Policy No. 033. The subcommittee met three times (August 31, October 7, and November 18). The subcommittee recommendations on Board Policy No. 033 will be presented to the Executive Committee on Friday, January 13, 2012, and the Board of Directors on Friday, January 27, 2012. For more information, contact Susan Baldwin at sba@sandag.org.

Agenda Item 6: Workshop on Lessons Learned Regarding the Use of the Regional Forecast on the 2050 Regional Transportation Plan and its Sustainable Communities Strategy and Regional Housing Needs Assessment Process (Information)

Coleen Clementson (SANDAG) informed the CTAC and TWG that on October 28, the SANDAG Board of Directors adopted the 2050 Regional Transportation Plan and its Sustainable Communities Strategy (2050 RTP/SCS) and the Regional Housing Needs Assessment (RHNA), both of which were based, in large part, on the 2050 Regional Growth Forecast. Ms. Clementson stated that before
initiating work on the Regional Comprehensive Plan (RCP) update, the Series 13 Regional Growth Forecast, and the next update of the RTP/SCS, the SANDAG staff would like to host a lunch workshop for the TWG, CTAC, and city managers to discuss lessons learned and policy issues. The workshop will be held on Thursday, January 12, 2012, from 12 noon to 3 p.m. at the Caltrans training room. In addition, a transportation modeling forum is scheduled at SANDAG on Wednesday, December 14, 2011, from 1:30 to 4 p.m. TWG and CTAC members were asked to mark their calendars with these important meetings and encourage their city managers to attend the January 12 workshop.

**Agenda Item 7: Draft Technical Update of Smart Growth Concept Map (Recommend)**

Carolina Gregor (SANDAG) provided an overview of the technical update of the Smart Growth Concept Map (SGCM). The updated SGCM incorporates underlying land use and transportation data from the 2050 Regional Growth Forecast and the 2050 RTP/SCS into the map for planning purposes and use in SANDAG’s smart growth incentive program. The TWG and CTAC were asked to review the attached copy of the Draft SGCM and Site Descriptions.

As a part of the technical update, 200 smart growth opportunity areas (SGOAs) were updated to reflect changes in land use intensity, place type designation, potential versus existing/planned status, and boundary designations. Specifically, 29 SGOAs changed from potential to existing/planned status, which reflects local planning efforts and general plan updates, and six changed from existing/planned to potential status, which reflects changes in forecast data, transit, and/or density. SGOAs in several jurisdictions were renumbered for greater clarity as well. In addition, the updated map also reflects updated habitat preserve area boundaries.

The TWG made a recommendation to forward the updated SGCM and Site Descriptions to the Regional Planning Committee (RPC) in substantially the same form as presented at the meeting. Ms. Gregor thanked everyone for their help on the SGCM and expressed that any additional refinements be sent to her at cgr@sandag.org.

On January 6, 2012, the RPC will consider making a recommendation on the SGCM to the SANDAG Board of Directors. On January 27, the Board of Directors will consider accepting the updated SGCM and site descriptions for planning purposes.

**Action:** Upon a motion by John Conley (Vista) and a second by Don Neu (Carlsbad), the TWG unanimously recommended forwarding the draft technical update of the SGCM and Site Descriptions to the RPC in substantially the same form as presented at the meeting.

**Agenda Item 8: Initial Planning for the Regional Comprehensive Plan Update (Discussion)**

In 2004, the Board of Directors adopted the RCP for the San Diego region. The RCP serves as the region’s long-term planning framework. Much has changed since the plan’s adoption, resulting in the need for a comprehensive update. The 2050 RTP/SCS will serve as a foundational component for the RCP update. Carolina Gregor (SANDAG) announced that, in February 2012, the SANDAG Board of Directors will discuss the RCP update at their Board Retreat.

The floor was opened for questions and comments.
Mr. Bullock expressed his support for quantifying the effectiveness in smart growth incentive programs using the reduction of VMT per dollar spent as a performance measure.

Barbara Redlitz (Escondido) expressed the need to coordinate the RCP update process with local jurisdictions that are updating their general plans as well. Ms. Redlitz informed the TWG and CTAC that Escondido will be presenting their general plan for public approval in November 2012.


Stephan Vance and Vikrant Sood (SANDAG) made a presentation about SANDAG’s current collaboration with the San Diego County Health and Human Services Agency on the Healthy Works™ project. Key deliverables for the project include: (1) a policy framework that integrates public health principles into regional policies and programs; and (2) a set of performance measures to evaluate and monitor success. Staff is working with the Public Health Stakeholder Working Group to develop both the draft Health and Wellness Policy Framework and Potential Performance Measures for the upcoming RCP update process.

The draft Health and Wellness Policy Framework and Potential Performance Measures are organized by the following nine topic areas: (1) Urban Form, (2) Mobility, (3) Housing, (4) Environment, (5) Economic Development, (6) Social Equity and Environmental Justice, (7) Public Facilities and Amenities, (8) Public Safety, and (9) Healthy Food and Nutrition.

Preliminary drafts of these documents were presented to the TWG and CTAC for review and comment, with a request to make a recommendation regarding the draft Health and Wellness Policy Framework and Potential Performance Measures to the RPC in substantially the same form as presented at the meeting. Mr. Sood asked for all comments to be submitted by December 15, 2011.

The floor was opened for questions and comments.

Mr. Bullock expressed his belief in SANDAG’s great staff, but remains concerned about the agency’s direction. Mr. Bullock stated support for quantifying the effectiveness of smart growth incentive programs using the reduction in VMT per dollar spent as a performance measure. Mr. Bullock proposed a Traffic Skills 101 class that, as an alternative to constructing bike trails, could educate people about biking in traffic in order to more effectively reduce the amount of driving in San Diego. Mr. Bullock also expressed that reducing CO₂ emissions needs to have a greater priority among SANDAG’s projects.

Ms. Clementson reminded working group members that the policies are not set in stone and will be refined throughout the RCP update process.

Nancy Bragado (City of San Diego) encouraged SANDAG staff to consider adding best practices that balance smart growth and infill development policies with potential air pollutants and noise exposure impacts.
Tim McCormick (North County Transit District) highlighted several unintended consequences of transit-oriented developments (TODs) that create barriers to walkability from his own experience with the SPRINTER, such as limited foot access for neighboring parcels and the difficulty in creating Americans with Disabilities Act compliant access ramps for certain projects. Mr. McCormick called for an examination of best practices that look at walkability and accessibility as tangible outcomes rather than an abstract concept. Mr. Sood responded that walkability and accessibility vary on a project-by-project basis, but can be governed by local permitting processes and guidelines. Additionally, Mr. Sood stated that a body of literature exists that could be used to help shape best practices for TOD design. Mr. Stoll added that there are current efforts to conduct walking audits of station areas, such as those currently planned for the Mid-Coast Trolley Extension.

Patrick Murphy (Encinitas) expressed the need to include access to medical and social services as one of the goals of the Health and Wellness Policy Framework. Mr. Murphy stated that overall, long-term public health performance measures should be included in the program as well.

Mr. Chopyk inquired about how the Health Impact Assessment process will be applied to evaluate projects. Mr. Sood explained that SANDAG’s preferred approach would be to conduct a health benefits analysis early on as part of the project development process rather than conduct an onerous and time-consuming process woven into the California Environmental Quality Act.

Action: Upon a motion by Ms. Bragado and a second by Ms. Garcia, the TWG unanimously recommended forwarding the draft Health and Wellness Policy Framework and Performance Measures to the RPC in substantially the same form as presented at the meeting.

**Agenda Item 10: Input on Visualization Tools (Information)**

Kirby Brady (SANDAG), made a presentation on the initial phase of creating an inventory of visualization tools that local and regional planners could use to help the public and local stakeholders understand planning data associated with current and future planning projects, including the upcoming RCP. Ms. Brady provided a brief overview of initial ideas and asked for input from the TWG and CTAC on how to make the inventory useful to local jurisdictions. Additionally, Ms. Brady asked for interested TWG and CTAC members to volunteer and help oversee the development of the Visualizations Toolbox.

The floor was opened for questions and comments.

Ms. Garcia expressed the need for the toolbox to be visual in nature itself and be able to produce visualization methods that can be used in a variety of formats.

Ed Batchelder (Chula Vista) requested that the complexity, cost, and timing for each visualization method be included in the toolbox.

Additional input can be sent to Kirby Brady at kbr@sandag.org.
**Agenda Item 11: Draft Regional Safe Routes to School Strategic Plan (Information)**

Bridget Enderle (SANDAG) made a presentation about Safe Routes to School (SRTS) efforts, which support the regional objectives of the RCP and 2050 RTP/SCS by creating walkable and bicycle-friendly communities, encouraging active transportation to reduce vehicle trips, and improve public health. The draft Regional SRTS Strategic Plan proposes a regional strategy to support local communities in establishing new SRTS programs, as well as sustaining and enhancing existing efforts. Ms. Enderle provided an overview of the draft Regional SRTS Strategic Plan, which includes 4 chapters: (1) Introduction, (2) Existing Issues and Opportunities, (3) Existing SRTS Efforts, and (4) A Regional Strategy.

The draft Regional SRTS Strategic Plan is available at sandag.org.

The floor was opened for questions and comments.

Mr. Bullock proposed the reduction in VMT as a criteria for evaluating SRTS and for the inclusion of a car parking strategy in the draft SRTS Strategic Plan. Specifically, Mr. Bullock called for a plan that unbundles the cost of car parking and cited an average 23 percent decrease in driving when people are charged for parking.

Greg Humora (La Mesa) inquired about the engagement of school districts and parent teacher associations (PTAs) with the project. Ms. Enderle responded that several school districts have representation on the regional coalition shaping recommendations for the SRTS program. Additionally, Ms. Enderle stated that SANDAG has been working with the County Office of Education in order to provide information regarding the SRTS program to school districts. Ms. Enderle further stated that SANDAG is continuing to look for new opportunities to partner with groups for the SRTS program. Mr. Humora further emphasized the critical need to reach out to PTAs and gain their support for the SRTS program.

Hank Levien (Imperial Beach) echoed Mr. Humora’s sentiments and explained that many school districts have policies that prohibit and/or discourage bike riding completely, citing the South Bay School District and Sweetwater School District as examples. Mr. Levien expressed that school support is necessary for the SRTS program’s success.

Russ Cunningham (Oceanside) cited school attendance and busing policies as barriers to biking and walking to school.

Linda Marabian (City of San Diego) stated that another challenge to the SRTS program is the physical orientation of schools, especially drop-off locations and main entrances.

John Conley (Vista) stated that out of 42 districts in the county, only eight have adopted SRTS policies. Mr. Conley suggested that SANDAG help facilitate dialogue between cities and school districts in order to implement the SRTS program.

**Agenda Item 12: Adjournment and Next Meetings (Information)**

The next CTAC meeting will be held on Thursday, January 5, 2012, from 9:30 to 11 a.m.
The next TWG meeting will be held on Thursday, February 9, 2012, from 1:15 to 3:15 p.m.

**Action:** The joint TWG and CTAC meeting was adjourned by Zoubir Ouadah (Poway, Vice Chair CTAC).
Cities/County Transportation Advisory Committee (CTAC)

2012 Meeting Schedule

January 5, 2012
February 2, 2012
March 1, 2012
April 5, 2012
May 3, 2012
June 7, 2012
July 5, 2012
August 2, 2012
September 6, 2012
October 4, 2012
November 1, 2012
December 6, 2012
## 2012 CTAC Membership List

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<td>Carlsbad</td>
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<td>Marshall Plantz</td>
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<td>Dave Kaplan</td>
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<td>Metropolitan Transit System</td>
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* Chair  
** Vice-Chair
Technical Appendix 20

SANDAG Federal Congestion Management Process

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Introduction

Federal Highway Administration 23 CFR 450.320 requires that each transportation management area (TMA) address congestion management through a process involving an analysis of multimodal metropolitan wide strategies that are cooperatively developed to foster safety and integrated management of new and existing transportation facilities eligible for federal funding. The requirements specifically state that “in TMAs designated as nonattainment for ozone or carbon monoxide, the congestion management process shall provide an appropriate analysis of reasonable (including multimodal) travel demand reduction and operational management strategies for the corridor in which a project that will result in a significant increase in capacity for single occupancy vehicles (SOV) is proposed to be advanced with Federal funds.” Additionally the guidelines state that “federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for SOVs (i.e., a new general purpose highway on a new location or adding general purpose lanes, with the exception of safety improvements or the elimination of bottlenecks), unless the project is addressed through a congestion management process meeting the requirements of this section.”

SANDAG was designated as the TMA for the San Diego region. The 2050 RTP meets the requirements of 23 CFR 450.320 by incorporating the following federal congestion management process; performance monitoring and measurement of the regional transportation system, multimodal alternatives and non-SOV analysis, land use impact analysis, the provision of congestion management tools, and integration with the regional transportation improvement program (RTIP) process.

Background

California State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare and regularly update a Congestion Management Program (CMP). The requirements within the State CMP were developed to monitor the performance of the transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning. SANDAG provided regular updates for the State CMP from 1991 through 2008. In October 2009, the San Diego region elected to be exempt from the State CMP and, since this decision, SANDAG has been abiding by 23 CFR 450.320 to ensure the region’s continued compliance with the Federal congestion management process.

Regional Transportation System

The 2050 Regional Transportation Plan (2050 RTP) includes a regional transportation system of highways, regional transit service, and regional arterials. Chapter 6 of the 2050 RTP provides a comprehensive overview of the components of systems development for the regional transportation network including the regional transit strategy, flexible roadway system, goods movement strategy, aviation and ground access, active transportation, and planning across borders components.

Performance Monitoring

The 2050 RTP includes a variety of strategies to enhance regional transportation systems management including multimodal traffic management techniques, as well as new techniques related to both improving performance monitoring, and information and services to regional transportation systems users. Chapter 7 of the 2050 RTP provides a comprehensive overview of systems management techniques including
performance monitoring. Performance monitoring reports include the State of Commute Report, Regional Comprehensive Plan (RCP) Monitoring Report, the TransNet Independent Taxpayer Oversight Committee (ITOC) Quarterly Corridor Performance Report, as well as the Coordinated Public Transit – Human Services Transportation Plan (Coordinated Plan) Quarterly Transit Performance Monitoring Report.

The State of the Commute, RCP Monitoring, and ITOC Quarterly Corridor Performance reports include and are not limited to monitoring:

- Freeway miles traveled per person during weekdays
- Percent of roadways traveled (freeways versus local roads) versus total lane miles (freeways versus local roads)
- Regional travel by transit
- Total transit, rail, and bus ridership
- San Diego regional annual transit boardings
- Transit use in well served areas
- Regional commute mode shares
- Drive alone mode share
- Alternative Transportation Mode share (carpool/vanpool, public transit, walk, bike, telework, other)
- Auto and transit passenger travel times and travel volumes in key corridors
- Annual hours of traffic delay per traveler
- Annual peak period delay during weekends
- Regional bottlenecks determined by annual freeway delay (vehicle hours) per lane mile
- Delay by freeway during commute periods
- Annual freeway delay by major corridor per traveler (estimated)

The State of the Commute Report is updated annually, while the RCP Monitoring Report is updated biennially.

The Quarterly Transit Performance Monitoring Report includes monitoring the efficiency and productivity of transit operating services by service type. These indicators include:

- Operating cost per passenger
- Operating cost per revenue hour
- Passengers per revenue hour
- Passengers per revenue mile
- Revenue hours per employee
- Farebox recovery rate

The Coordinated Plan also includes annual transit performance indicators by service route for both the Metropolitan Transit System (MTS) and North County Transit District (NCTD). This plan is updated annually.

**Multimodal Alternatives and Non-Single Occupancy Vehicle Analysis**

SANDAG incorporates multimodal alternative and non-SOV analysis throughout all levels of planning and/or programming for transportation project improvements. These forms of analysis are incorporated whether the project improvement relates to an SOV or non-SOV capacity increasing improvement. The three primary areas of project development involved in this analysis include...
Regionwide Study Analysis

The RTP serves as the long-range transportation plan for the San Diego region. Updated every four years, the RTP incorporates recommendations from various corridor studies, transit studies, and project study reports. All projects, services, and programs are evaluated and prioritized for future funding. The RTP also includes regionwide and corridor level performance indicators that are reflective of a multimodal approach and inform the development and management of the most effective long-term transportation system, as well as demand management strategies for minimizing and/or managing anticipated congestion. Technical Appendices 3 and 4 provide a comprehensive overview of the development of the 2050 RTP transportation project evaluation criteria and plan performance measures and methodologies.

The RTIP serves as the short-term programming document that implements the RTP, and includes projects funded with federal, state, and local transportation funding. These projects include regionally significant capacity increasing projects (as identified in the RTP), minor projects, maintenance and operations projects and other exempt projects. For the regionally significant capacity increasing projects including SOV capacity increasing projects, the RTIP relies on the process implemented through the RTP for the coordination and consultation involved in developing and establishing the congestion management strategies. The projects included in the RTIP are the end result of implementing the process established in the RTP.

Corridor Study Analysis

Corridor studies incorporate RTP long-range multimodal transportation projects including operational improvements, highway capacity increasing improvements, transit service improvements, active transportation, and transportation demand management (TDM) and transportation systems management (TSM), etc. Corridor studies allow for opportunities to highlight the need for additional transportation improvements and/or the future planning development of projects as related to the RTP. Examples of recent SANDAG corridor studies include:

- I-15 Managed Lanes Study
- I-5 South Multimodal Corridor Study
- SR 78 Corridor Study

Other corridor studies include transportation concept summaries (TCS) and project study reports (PSR) developed by Caltrans and corridor system management plans (CSMP) jointly developed by Caltrans and SANDAG. The development of PSRs informs the development of RTP priorities and RTIP programming. As highway projects are further developed through the environmental phase, viable multimodal alternatives are analyzed along with capacity enhancing alternatives.

Local Level Analysis

Local jurisdiction projects that receive federal funds to develop capacity increasing improvements are required to provide sufficient documentation that an appropriate multimodal alternative and non-SOV analysis has been performed. This analysis is required to be completed prior to submitting a project for inclusion within the RTIP.
Land Use Impact Analysis

Regional Models

The 2050 RTP includes the 2050 Regional Growth Forecast which is based on land use inputs gathered from the region’s 18 incorporated cities and the County. These inputs include current adopted general and community plans, the County’s Referral Map draft land use plan of 2009 with adjustments to reflect habitat constraints, and draft general plan updates, as provided by the local land use authority. In many cases jurisdictions are moving forward with Smart Growth principles as outlined in the Regional Comprehensive Plan (RCP). SANDAG uses four models in its forecasts: (1) the Demographic and Economic Forecasting Model (DEFM), (2) the Interregional Commute Model (IRCM), (3) the Urban Development Model (UDM) and (4) the Transportation Forecasting Model. The 2050 RTP Technical Appendix 15 provides additional information specifically related to the SANDAG transportation modeling process.

Intergovernmental Review

Per state law, SANDAG has the authority to determine whether a project or plan will need to be reviewed for regional significance. SANDAG staff reviews projects and determines if they are regionally significant based on the amount of traffic generated and other regionally significant issues. If significant, environmental review of projects should include consideration of applicable policy objectives contained in the RCP and 2050 RTP.

For projects considered to have significant impacts, SANDAG staff provides comments from a regional perspective that emphasize the need for land use and transportation coordination and are based on policies contained in the RCP and 2050 RTP. In addition to the RCP and 2050 RTP, SANDAG provides resources for the evaluation of projects including:

- San Diego Region Aggregate Supply Study
- Designing for Smart Growth, Creating Great Places in the San Diego Region
- Planning and Designing for Pedestrians, Model Guidelines for the San Diego Region
- Trip Generation for Smart Growth
- Parking Strategies for Smart Growth
- Regional Multimodal Analysis Study

Congestion Management Tools

The 2050 RTP provides a variety of congestion management tools. Many of these tools and strategies are included within Chapters 6, 7, and 8 of the 2050 RTP. In addition to the 2050 RTP, the RCP provides incentives and assistance to local member agencies to encourage smart growth development in the areas identified on the Smart Growth Concept Map. The SANDAG “Smart Growth Tool Box” includes both planning and financial tools.

Systems Development Measures

- Improvements to the current system that will improve the convenience and travel speed of bus and rail services
- Implementation of new transit services that will improve transit in more areas and offer new service types designed to attract new riders to transit
- Enhancing the transit customer experience to make transit easier, safer, and more enjoyable to use
- Continue to develop and enhance active transportation through bicycle and
pedestrian facilities and bike lockers, and implementation of Regional Bicycle Plan

- Continue to develop and enhance safe routes to schools plans and strategies

**TSM Measures**

- Multimodal integration and performance based management including performance monitoring and real time modeling/simulation
- Traveler information
- Arterial management
- Freeway management
- Transit management – bus and light rail including regional scheduling system (RSS), regional transit management system (RTMS), positive train control (PTC), and centralized train control (CTC)
- Electronic payment services including Compass Card, FasTrak® Open Road Tolling, and smart parking systems
- Advanced technologies including wireless detection, real time multimodal modeling and simulation, etc.

**TDM Measures**

- iCommute – the regional TDM program
- TDM strategy – outreach, education, and financial incentives
- TDM programs including regional vanpool, carpool, buspool, school services (SchoolPool), telework and alternative work schedules, and bicycle encouragement programs, and multimodal solutions including first- and last-mile solutions, Compass Card integration, and 511 advanced traveler information services
- New directions including corridor approach and construction mitigation
- Performance monitoring

**RCP Implementation Measures**

- Outreach program
- Smart Growth Concept Map
- Visualization tools and photo library
- Smart growth design guidelines
- Smart growth trip generation/parking study
- Research on connections between public health, land use, and transportation
- Planning and designing for pedestrians
- TransNet Smart Growth Incentive Program (SGIP)
- TDA/TransNet Bicycle, Pedestrian, and Neighborhood Safety Program

**Regional/Federal Transportation Improvement Program**

The Regional/Federal Transportation Improvement Program (R/FTIP) is a multi-billion dollar, five-year program of major highway, transit, arterial, and nonmotorized projects funded by federal, state, TransNet local sales tax, and other local and private funding.

The RTIP serves as a prioritized program designed to implement the region’s overall strategy for providing mobility and improving the efficiency and safety of the transportation system, while reducing transportation related air pollution in support of efforts to attain federal and state air quality standards for the region.
Chapters 2 and 3 in the 2010 RTIP provide a description of the development process, including federal, state, and TransNet transportation programming requirements and the detailed listings of projects. All local agency SOV capacity increasing projects seeking or that is eligible for federal funds are required to perform a multimodal alternative and non-SOV analysis prior to submitting SOV capacity increasing projects for inclusion in the RTIP. The multimodal alternative and non-SOV analysis must document an SOV capacity increasing project assessment that has considered the components within the congestion management tools section of the SANDAG Federal Congestion Management Process:

- Systems development measures
- TSM measures
- TDM measures
- RCP implementation measures

Each agency is required to assess whether the project has been evaluated for non-SOV capacity improvements. Agency documentation should be provided to SANDAG when submitting the project for inclusion in the RTIP.
San Diego Association of Governments

CITIES/COUNTY TRANSPORTATION ADVISORY COMMITTEE

January 5, 2012

AGENDA ITEM NO.: 6

Action Requested: RECOMMEND ACCEPT

REGIONAL ARTERIAL MANAGEMENT SYSTEM (RAMS) UPDATE File Number 3310800

Introduction

SANDAG is completing the implementation of the Regional Arterial Management System (RAMS) to enhance inter-jurisdictional coordination of traffic signals along freeway interchanges and major streets/arterial corridors throughout the San Diego region. The RAMS project enhances each agency’s ability to manage their signals and provides the ability to coordinate signal timing plans across jurisdictions. RAMS will allow jurisdictions to develop, propose, and implement traffic signal timing plans spanning multiple jurisdictions for day-to-day, planned special events, and emergency conditions.

The following report provides information and recommended actions to be considered as part of the transition of the regional arterial management activities from an implementation project to ongoing maintenance and operations. Central to this discussion is recent development of a regional framework for ongoing maintenance and support of the RAMS/QuicNet4+ (RAMS) software, associated infrastructure, and telecommunications network. Staff worked with the San Diego Traffic Engineers Council (SANTEC) to develop a regional framework to fund hardware, software, and network support on behalf of local agencies currently participating in RAMS. As part of these ongoing discussions, staff also has recommended various cost-sharing alternatives for allocating these costs across local agencies. This report provides an overview of the recommended and approved SANTEC support model and will request that the Cities/County Transportation Advisory Committee (CTAC) support the recommended model and provide a recommendation to the Transportation Committee accept the recommendation.

Background

As one of the four key components of 2050 Regional Transportation Plan, Systems Management plays a vital role in maximizing the benefits of existing transportation investments. RAMS is one of several regional Intelligent Transportation System (ITS) deployment projects that support the region’s ITS Strategic Plan to enhance overall system management. The RAMS project was initiated as part of the U.S. Department of Transportation’s (USDOTs) Southern California ITS Priority Corridor Showcase Program. Funding for the RAMS project is being provided through the ITS Priority Corridor Showcase Program, as well as other federal, state, and local sources totaling approximately $1.6 million.
The primary objective of the RAMS project is to enhance arterial traffic management capabilities by establishing a common traffic signal systems communications platform throughout the San Diego region. The system would allow traffic engineers to share and view traffic signal timing information on a corridor and cross-jurisdictional level. The RAMS project leveraged the majority of the cities’ existing investment in the QuicNet traffic signal system, by upgrading the system and providing enhancements and integration to fit the region’s needs. The key to making this project successful in the region is the active participation of local agencies, through representation on SANTEC.

The RAMS implementation project consisted of initial system design and development of the RAMS architecture, and deployment to the project “core” agencies, San Diego, Chula Vista, and Caltrans District 11. Upon completion of the initial deployment in fall 2008, staff deployed RAMS to the remaining fourteen local agencies. Each participating agency was delivered a RAMS server and ancillary hardware (i.e., router and firewall) to connect to the RAMS network. All local agency servers are connected to the central RAMS server through a Frame Relay telecommunications network currently supplied by AT&T. Additional work was done through the RAMS project to provide an interface between RAMS and the regional Intermodal Transportation Management System (IMTMS).

**Discussion**

**Regional Support Model and Cost-Sharing Alternative**

As the RAMS project moved toward completion, staff began discussion with SANTEC members regarding transition of RAMS to ongoing operations, with focus on the support and maintenance of the QuicNet4+ software and associated hardware. Staff estimates that the annual cost to support and maintain the regional RAMS environment is approximately $286,000 for the eighteen participating agencies.

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimated Annual Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>QuicNet4+ Software Support</td>
<td>$100,000</td>
</tr>
<tr>
<td>Hardware Support (server, firewall, and router)</td>
<td>$78,000</td>
</tr>
<tr>
<td>Distributed Network</td>
<td>$78,000</td>
</tr>
<tr>
<td>Technical Services and Training</td>
<td>$30,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$286,000</strong></td>
</tr>
</tbody>
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At the September 2011 SANTEC meeting, staff proposed three potential models for ongoing RAMS support and maintenance for SANTEC consideration. Each support model proposed the project vendor, McCain Inc., to be retained to provide support of the customized QuicNet4+ software delivered as part of the RAMS project. The proposed models varied in the responsibility for supporting and maintaining the RAMS hardware support.
At the October SANTEC meeting, SANTEC members recommended that staff pursue Support Model “A,” but recommended that the regional block of consulting hours for technical services and training be removed from further consideration.

At the November 2011 meeting, staff provided a revised set of five cost-sharing alternatives to modified Support Model “A,” valued at $256,000:

1. Equal Cost-Sharing ($14,000 per agency)
2. Costs Weighted by Agency Traffic Signal Count ($4,300 to $80,100 per agency)
3. Established Base Cost Plus Signal-Weighted Premium ($5,000 to $75,600 per agency)
4. Costs Weighted by Inter-Jurisdictional Utility ($7,500 to $31,600 per agency)
5. Established Base Cost Plus Inter-Jurisdictional Premium ($8,000 to $30,400 per agency)

Alternatives 4 and 5 were developed by staff to reflect the “inter-jurisdictional” nature of the RAMS functionality and a local agency’s actual and potential for traffic signal coordination with an adjacent agency.

Staff made a formal recommendation to SANTEC members to move forward with Alternative 1 (Equal Cost-Sharing) for future consideration. Based on the regional architecture of the RAMS platform, staff believes an equal sharing support costs best reflects the actual cost for ongoing maintenance and support as the vendor pricing and support efforts is based on supporting the single server and identical communications at each agency. Alternative 1 also provided the simplest cost-sharing methodology, requiring no additional information or data to determine annual agency costs. Alternatives 2 and 3 would require continued monitoring and maintenance of local traffic signal inventories and annual updates to local agency costs. Alternatives 4 and 5 were based on geopolitical boundaries rather than actual or potential inter-jurisdictional traffic signal coordination.

SANTEC members approved a motion to reject the staff recommendation to continue further consideration of Alternative 1, citing issues of equity and fairness, where larger agencies with more traffic signals share the same costs as smaller agencies with less traffic signals. SANTEC members requested that staff reconsider a revised cost-sharing alternative and proposed and approved a motion that SANDAG develop a modified Alternative 2 (Costs Weighted by Agency Traffic Signal Count) for future consideration, with SANDAG having a larger level of cost share ranging from $78,000 to $256,000.
Due to the priorities currently set for known regional funding sources (i.e., federal Congestion Mitigation and Air Quality, TransNet), and nature of requested funding need which is identified as an ongoing operational costs, staff has been unable to identify available funding to the recommended levels requested by SANTEC members for Alternative 2. Accordingly, during its December 8 SANTEC meeting, staff developed a modified Alternative 3, called Alternative A3.1, which reflects a cost-sharing methodology that allocates costs based on the local agency’s share of traffic signals in the region. Since SANDAG does not operate any traffic signals in the region, the regional agency has identified funding to cover a 1/18th share of the regional support costs (as previously determined in Alternative 1). Alternative A3.1 incorporates a baseline cost of $5,000 per local agency as initially proposed.

**Alternative A3.1: $5,000 Base Cost Plus Signal-Weighted Premium**

<table>
<thead>
<tr>
<th></th>
<th>Signal Count</th>
<th>Signal %</th>
<th>Total Annual Costs</th>
<th>Cost Share %</th>
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<tbody>
<tr>
<td>City of San Diego</td>
<td>1,520</td>
<td>43%</td>
<td>$71,771</td>
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<tr>
<td>Caltrans</td>
<td>470</td>
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<td>Chula Vista</td>
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<td>$16,114</td>
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<td>County of San Diego</td>
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<td>5%</td>
<td>$12,995</td>
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<tr>
<td>Carlsbad</td>
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<td>Solana Beach</td>
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<tr>
<td><strong>Grand Total</strong></td>
<td><strong>3,574</strong></td>
<td><strong>100%</strong></td>
<td><strong>$256,000</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

# City of Santee owns router and firewall, agency cost subject to change
^ City of Vista owns server, agency cost subject to change

Note that agency costs outlined in Alternative A3.1 are subject to change, with final agency costs determined at a later date based on the level of local agency participation. Also, any changes to the regional traffic signal inventory would need to be monitored and formula parameters changed on a regular basis.
SANTEC passed a motion recommending further consideration of Alternative A3.1 and requested that the item be presented to CTAC for recommendation confirmation and acceptance. Members indicated support for Alternative A3.1 through local agency funding to be provided by allocation of local funds including TransNet local funds or any other local fund sources.
Next Steps

This report provided an overview of the approved SANTEC recommendation for a regional support model and is being presented to CTAC to request that CTAC support the recommended model and recommend approval by the Transportation Committee, accept the recommendation.

Upon recommendation by CTAC of the regional support model and cost-sharing methodology recommended by SANTEC at its December 8 meeting, staff will finalize costs and continue efforts towards a regional support agreement with the project vendor. Staff will work with participating agencies on developing the appropriate local resolutions or fund transfer agreements to allocate local funds to SANDAG for RAMS support. Staff also will work with non-participating agencies and the vendor to coordinate the transition to local QuicNet4+ operations and any required software modifications.

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